

We claim:

1. An electric vehicle, comprising:

10 one or more electric motors and/or generators,

wherein at least one motor and/or generator is an adaptive electric machine comprising two or more electromagnetic circuits that are sufficiently isolated to substantially eliminate electromagnetic and electrical interference between the circuits.

15 2. A vehicle, comprising:

two or more wheels, and

one or more electric motors, each mounted in an in-wheel, near-wheel, or direct-drive manner,

wherein at least one motor is an in-wheel motor with torque density of at least 20  
20 Nm/kg and comprises a multiphase machine having a rotor, a stator, the stator comprising a plurality of stator core elements, the plurality of stator core elements being arranged in groups, each group of stator core elements being associated with a corresponding one of the phases of the multiphase machine, the stator core elements in each group being structurally and electromagnetically isolated from the stator core elements in each other

5 group, and a controller for controlling electrical flow in each group of stator core elements independently of electrical flow in each other group, whereby each phase of the multiphase machine is controlled independently of each other phase.

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